## ABSTRACT OF THE DISCLOSURE

A scanning transmission electron microscope has an electron beam energy analyzer (energy filter) to observe electron beam energy loss spectra and element distribution images. This electron microscope further includes a deflection coil provided on the upstream side of a magnetic sector to correct for the electron beam path in a plane normal to the optical axis and make the electron beam incident to the energy filter, a deflection coil for correcting for the electron beam path in the energy axis direction of an energy dispersion surface formed by the magnetic sector, and a control unit for controlling the exciting conditions of the deflection coils.